AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (Original) A system for digitization of complex work processes conducted during operation and/or testing of machinery or equipment, comprising:

an information processing system including an equipment controller and at least one fixed point wireless communications access station, the information processing system receiving and processing data or commands from one or more wireless communications access station relating to said machinery or equipment, and the controller controlling operation of the machinery or equipment in response to data or commands from the information processing system; and

a voice-responsive computing/communications device, said device providing speech recognition and adaptively providing background noise suppression to reduce or substantially eliminate non-speech ambient background noise, wherein the voice-responsive/communications device is in wireless communication with the information processing system via at least one fixed point wireless communications access station and is responsive to one or more vocal utterances of a user for communicating data to the information processing system and/or generating operational control commands to provide to the equipment controller for controlling said machinery or equipment.

2.   (Original) The system of claim 1 wherein said information processing system comprises a local area network (LAN).

3.   (Original) The system of claim 1 wherein said voice-responsive computing/communications device includes a directional microphone.

4.   (Original) The system of claim 1 further comprising a wireless communications network (WLAN) that permits digital communications with at least one remote private network or computer facility.

5.   (Original) The system of claim 4 wherein the wireless communication network comprises at least one antenna assembly having a transceiver system for transmitting and receiving signals from at least one wireless communications LAN access station.

6.   (Original) The system of claim 4 wherein said at least one remote private network or computer facility comprises a network server computer communicatively coupled to said voice-responsive computing/communications device via the wireless communications network, said server computer including a database for storing application data accessible by a user of said voice-responsive computing/communications device.

7.   (Original) In a voice-responsive computing/communications device having a microphone and providing speech recognition capabilities, a method for adaptively eliminating non-speech ambient background noise, comprising:

a) sampling and pulse code modulating an analog signal from the microphone;

b) transforming a pulse code modulated signal produced by (a) into a frequency domain;

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c) identifying ambient non-speech noises or noise bands according to one or more predetermined digital frequency domain signatures that are characteristic of said noises or noise bands; and

d) subtracting identified ambient non-speech noises or noise bands from the pulse code modulated signal;

wherein said eliminating of non-speech ambient background noise is performed continually by said responsive computing/communications device during reception and processing of an analog signal from the microphone for providing speech recognition.

8. (Original) The method of claim 7 further comprising performing speech-specific noise elimination and speech recognition analysis on said pulse code modulated signal after subtracting identified ambient non-speech noises or noise bands.

9. (Original) The method of claim 7 further comprising performing active selective frequency band filtering of the microphone signal in the analog domain prior to sampling and transforming to a pulse code modulated signal.

10. (Original) In a voice-responsive computing/communications device having a microphone and providing speech recognition capabilities, a computer implemented method of adaptive ambient background noise elimination, comprising the steps of:

storing one or more frequency domain digital audio signatures corresponding to predetermined non-speech environmental noises or noise bands;

sampling an analog signal from the microphone and converting the analog signal to a pulse code modulated signal;

analyzing a frequency domain transform of the pulse code modulated signal to identify one or more of said frequency domain digital noise signatures; and

subtracting identified ambient non-speech noises or noise bands from the pulse code modulated signal;

wherein adaptive real-time elimination of a plurality of different ambient non-speech background noises from audio signals produced by the microphone during voice-responsive operation of the computing/communications device enhances error-free recognition of user-vocalized information and commands.

11.   (Original) The method of claim 10 further comprising performing active selective frequency band filtering of the microphone signal in the analog domain prior to sampling and converting to a pulse code modulated signal.

12.   (Original) The method of claim 10 further comprising performing speech-specific noise elimination and speech recognition analysis on said pulse code modulated signal after subtracting identified ambient non-speech noises or noise bands.